

01 HAMILTON, BROOK, SMITH & REYNOLDS, P.C.

JUN 18 2003

PATENT & TRADEMARK OFFICE

**POWER OF ATTORNEY OR  
AUTHORIZATION OF AGENT AND  
CORRESPONDENCE ADDRESS**

<i>Application Number</i>	10/054,678
<i>Filing Date</i>	January 22, 2002
<i>First Named Inventor</i>	Pamela Sklar
<i>Confirmation Number</i>	4000
<i>Group Art Unit</i>	1645
<i>Examiner Name</i>	Not Assigned
<i>Attorney Docket Number</i>	2825.2012-004

**Title** Association of Dopamine Beta-Hydroxylase Polymorphisms with Bipolar Disorder

I/We hereby appoint

the attorneys/agents associated with **Customer No. 021005**

Practitioner(s) named below:

as my/our attorneys/agents to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

The correspondence address for the above-identified application is:

Customer Number 021005

Hamilton, Brook, Smith & Reynolds, P.C.  
530 Virginia Road  
P.O. Box 9133  
Concord, Massachusetts 01742-9133

Other \_\_\_\_\_

Please direct all telephone calls and facsimiles to:

Name Lisa M. Treannie, Esq. Tel. No. 978-341-0036 Fax No. 978-341-0136

I am the:

Applicant/Inventor.

Authorized representative of the Assignee, [ ], of the entire interest. See 37 C.F.R. 3.71. A Statement under 37 C.F.R. § 3.73(b) is enclosed.

Authorized representative of the Assignee, The General Hospital Corporation, together with Whitehead Institute for Biomedical Research and Johns Hopkins University, of the entire interest. A separate Statement under 37 C.F.R. § 3.73(b) is enclosed.

FRANCIS TONELLI, Ph.D.  
DIRECTOR

**SIGNATURE of Applicant or Assignee of Record**

**CORPORATE SPONSORED RESEARCH AND LICENSING**

Name & Title

Signature

Date

*L. Treannie*

5-23-03



Docket No. 2825.2012-004

STATEMENT UNDER 37 C.F.R. § 3.73(b)

Applicants: Pamela Sklar, Eric S. Lander, Melvin G. McInnis, J. Raymond DePaulo, Jr., Virginia Willour and James Potash

Application No.: 10/054,678 Filed: January 22, 2002

For: Association of Dopamine Beta-Hydroxylase Polymorphisms with Bipolar Disorder

The General Hospital Corporation, a Corporation  
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is

A.  the assignee of the entire right, title and interest in the patent application identified above; or  
B.  an assignee, together with Whitehead Institute for Biomedical Research and Johns Hopkins University, of the entire right, title and interest in the patent application identified above. A separate Statement under 37 CFR § 3.73(b) is being submitted for each assignee.

The right, title and interest of the above-named assignee in the patent application identified above is established by virtue of:

A.  An assignment from one of the inventors (Sklar) of the patent application identified above. The assignment was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or a copy thereof is attached.

OR

B.  A chain of title from the inventor(s) of the patent application identified above, to the current assignee as shown below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or a copy thereof is attached.
2. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or a copy thereof is attached.
3. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or a copy thereof is attached.

Additional documents in the chain of title are listed on a supplemental sheet.

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

Date: 5-23-03

Name: FRANCES TONEGUZZO, Ph.D.  
DIRECTOR  
CORPORATE SPONSORED RESEARCH AND LICENSING

Title: \_\_\_\_\_

Signature: F. Tonsguzzo

*Melvin G. Sklar*  
*COPY*

ASSIGNMENT

WHEREAS, I, Pamela Sklar, together with co-inventors **Eric S. Lander, Melvin G. McInnis, J. Raymond DePaulo, Jr., Virginia Willour and James Potash**, have invented a certain improvement in **ASSOCIATION OF DOPAMINE BETA-HYDROXYLASE POLYMORPHISMS WITH BIPOLAR DISORDER**, described in an application for Letters Patent of the United States, the specification of which:

[ ] is being executed on even date herewith and is about to be filed in the United States Patent Office;

[X] was filed on **January 22, 2002** as Application No. **10/054,678**;

[ ] was patented under U.S. Patent No. [ ] on [ ].

WHEREAS, **Whitehead Institute for Biomedical Research**, a corporation organized and existing under the laws of the State of Delaware, and having a usual place of business at **Nine Cambridge Center, Cambridge, Massachusetts 02142**, and **The General Hospital Corporation**, a corporation organized and existing under the laws of the **Commonwealth of Massachusetts**, and having a usual place of business at **55 Fruit Street, Boston, Massachusetts 02114** (jointly hereinafter "ASSIGNEES") desire to acquire an interest therein in accordance with agreements duly entered into with me;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, I have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEES, their successors, assigns and legal representatives, my entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application, together with my entire right, title and interest in and to said application and such Letters Patent as may issue thereon; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEES for their own use and behalf and for their successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by me had this assignment and sale not been made; I hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. I hereby acknowledge that this assignment, being of my entire right, title and interest in and to said invention, carries with it the right in ASSIGNEES to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEES' selection and the right to procure the grant of all such Letters Patent to ASSIGNEES' for their own name as assignees of the entire right, title and interest therein;

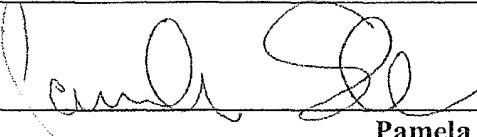
AND, I hereby further agree for myself and my executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEES, their

successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of substitution, reissue, divisional or continuation applications and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

AND, I do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEES, their successors, assigns, and legal representatives.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my seal the date set forth below.

Inventor's Signature:



Pamela Sklar

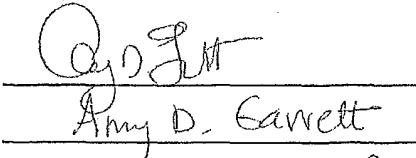
State/Commonwealth

of Massachusetts

County of Middlesex

Then personally appeared before me the above-named **Pamela Sklar** and acknowledged that she executed the foregoing instrument as her free act and deed this 22 day of April, 2003.

(SEAL)



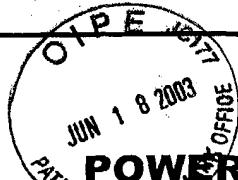
Notary Public

Amy D. Garrett (print name)

My Commission expires 2/15/2010

1645

**HAMILTON, BROOK, SMITH & REYNOLDS, P.C.**



**POWER OF ATTORNEY OR  
AUTHORIZATION OF AGENT AND  
CORRESPONDENCE ADDRESS**

<i>Application Number</i>	10/054,678
<i>Filing Date</i>	January 22, 2002
<i>First Named Inventor</i>	Pamela Sklar
<i>Confirmation Number</i>	4000
<i>Group Art Unit</i>	1645
<i>Examiner Name</i>	Not Assigned
<i>Attorney Docket Number</i>	2825.2012-004

**Title** ASSOCIATION OF DOPAMINE BETA-HYDROXYLASE POLYMORPHISMS WITH BIPOLAR DISORDER

I/We hereby appoint

the attorneys/agents associated with **Customer No. 021005**

Practitioner(s) named below:

as my/our attorneys/agents to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

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530 Virginia Road  
P.O. Box 9133  
Concord, Massachusetts 01742-9133

Other \_\_\_\_\_

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JUN 20 2003  
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Please direct all telephone calls and facsimiles to:

Name Lisa M. Treannie, Esq. Tel. No. 978-341-0036 Fax No. 978-341-0136

I am the:

Applicant/Inventor.

Authorized representative of the Assignee, , of the entire interest. See 37 C.F.R. 3.71. A Statement under 37 C.F.R. § 3.73(b) is enclosed.

Authorized representative of the Assignee, Johns Hopkins University, together with Whitehead Institute for Biomedical Research and The General Hospital Corporation, of the entire interest. A separate Statement under 37 C.F.R. § 3.73(b) is enclosed.

*SIGNATURE of Applicant or Assignee of Record*

Name & Title

**R. Keith Baker, Ph.D.**  
**Sr. Director, Technology Licensing**

Signature

*R. Keith Baker*  
6/21/03

Date



Docket No. 2825.2012-004

STATEMENT UNDER 37 C.F.R. § 3.73(b)

Applicants: Pamela Sklar, Eric S. Lander, Melvin G. McInnis, J. Raymond DePaulo, Jr., Virginia Willour and James Potash

Application No.: 10/054,678 Filed: January 22, 2002

For: Association of Dopamine Beta-Hydroxylase Polymorphisms with Bipolar Disorder

Johns Hopkins University, a University  
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is

- A.  the assignee of the entire right, title and interest in the patent application identified above; or
- B.  an assignee, together with Whitehead Institute for Biomedical Research and The General Hospital Corporation, of the entire right, title and interest in the patent application identified above. A separate Statement under 37 CFR § 3.73(b) is being submitted for each assignee.

The right, title and interest of the above-named assignee in the patent application identified above is established by virtue of:

A.  An assignment from the inventors (McInnis, DePaulo, Willour and Potash) of the patent application identified above. The assignment was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or a copy thereof is attached.

OR

B.  A chain of title from the inventor(s) of the patent application identified above, to the current assignee as shown below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or a copy thereof is attached.
2. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or a copy thereof is attached.
3. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or a copy thereof is attached.

Additional documents in the chain of title are listed on a supplemental sheet.

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

Date: 6/2/03

Name: R. Keith Baker, Ph.D.  
Title: Sr. Director, Technology Licensing  
Signature: R. Keith Baker

RECEIVED  
JUN 20 2003  
TECH CENTER 1600/2900

Docket No. 2825-2012-004COPY  
Multi-JoinASSIGNMENT

WHEREAS, we, Melvin G. McInnis, J. Raymond DePaulo, Jr., Virginia Willour and James Potash, together with co-inventors Pamela Sklar and Eric S. Lander, have invented a certain improvement in **ASSOCIATION OF DOPAMINE BETA-HYDROXYLASE POLYMORPHISMS WITH BIPOLAR DISORDER** described in an application for Letters Patent of the United States, the specification of which:

- is being executed on even date herewith and is about to be filed in the United States Patent Office;
- was filed on January 22, 2002 as Application No. 10/054,678;
- was patented under U.S. Patent No. [ ] on [ ].

WHEREAS, Johns Hopkins University (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the State of Maryland, and having a usual place of business at 720 Rutland Avenue, Baltimore, Maryland 21205 desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, our entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application, together with our entire right, title and interest in and to said application and such Letters Patent as may issue thereon; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of our entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein;

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of substitution, reissue, divisional or continuation applications and preliminary or other statements and the giving

-2-

of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives.

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals the date set forth below.

Inventor:

Melvin G. McInnis

State/Commonwealth

of MarylandCounty of Baltimore

Then personally appeared before me the above-named Melvin G. McInnis and acknowledged that he executed the foregoing instrument as his free act and deed this

11 day of July, 2002.

(SEAL)

Eloie J. Brown Notary Public

Eloie J. Brown (print name)

My Commission expires 11/01/04

-3-

Inventor:

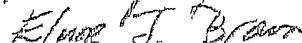

  
J. Raymond DePaulo, Jr.

State/Commonwealth  
of Maryland  
County of Baltimore

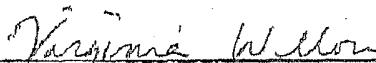
Then personally appeared before me the above-named J. Raymond DePaulo, Jr. and acknowledged that he executed the foregoing instrument as his free act and deed this  
11 day of July, 2002.

(SEAL)


  
Notary Public


  
(print name)
My Commission expires 1/1/09

Inventor:


  
Virginia Willour

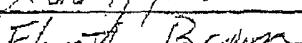
State/Commonwealth  
of Maryland  
County of Baltimore

Then personally appeared before me the above-named Virginia Willour and acknowledged that she executed the foregoing instrument as her free act and deed this

16 day of July, 2002.

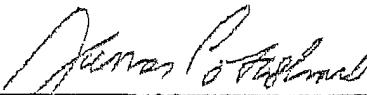
(SEAL)


  
Notary Public


  
(print name)
My Commission expires 1/1/09

-4-

Inventor:



James Potash

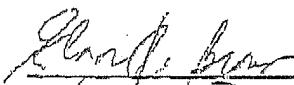
State/Commonwealth

of MarylandCounty of Baltimore

Then personally appeared before me the above-named James Potash and acknowledged that he executed the foregoing instrument as his free act and deed this

15 day of July, 2002.

(SEAL)

  
Elwood T. Brown Notary Public

(print name)

My Commission expires 1/1/04



**POWER OF ATTORNEY OR  
AUTHORIZATION OF AGENT AND  
CORRESPONDENCE ADDRESS**

<i>Application Number</i>	10/054,678
<i>Filing Date</i>	January 22, 2002
<i>First Named Inventor</i>	Pamela Sklar
<i>Confirmation Number</i>	4000
<i>Group Art Unit</i>	1645
<i>Examiner Name</i>	Not Assigned
<i>Attorney Docket Number</i>	2825.2012-004

**Title** ASSOCIATION OF DOPAMINE BETA-HYDROXYLASE POLYMORPHISMS WITH BIPOLAR DISORDER

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530 Virginia Road  
P.O. Box 9133  
Concord, Massachusetts 01742-9133

**RECEIVED**

JUN 20 2003

TECH CENTER 1600/2900

Please direct all telephone calls and facsimiles to:

Name Lisa M. Treannie, Esq. Tel. No. 978-341-0036 Fax No. 978-341-0136

I am the:

Applicant/Inventor.  
 Authorized representative of the Assignee, [ ], of the entire interest. See 37 C.F.R. 3.71. A Statement under 37 C.F.R. §3.73(b) is enclosed.  
 Authorized representative of the Assignee, Whitehead Institute for Biomedical Research, together with Johns Hopkins University and The General Hospital Corporation, of the entire interest. A separate Statement under 37 C.F.R. § 3.73(b) is enclosed.

**SIGNATURE of Applicant or Assignee of Record**

Name & Title	Patricia Granahan, Esq., Patent Counsel
Signature	<u>Patricia Granahan</u>
Date	<u>June 4, 2003</u>



Docket No. 2825.2012-004

STATEMENT UNDER 37 C.F.R. § 3.73(b)

Applicants: Pamela Sklar, Eric S. Lander, Melvin G. McInnis, J. Raymond DePaulo, Jr., Virginia Willour and James Potash

Application No.: 10/054,678 Filed: January 22, 2002

For: Association of Dopamine Beta-Hydroxylase Polymorphisms with Bipolar Disorder

Whitehead Institute for Biomedical Research, a Corporation  
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is

A.  the assignee of the entire right, title and interest in the patent application identified above; or  
B.  an assignee, together with Johns Hopkins University and The General Hospital Corporation, of the entire right, title and interest in the patent application identified above. A separate Statement under 37 CFR § 3.73(b) is being submitted for each assignee.

The right, title and interest of the above-named assignee in the patent application identified above is established by virtue of:

A.  An assignment from the inventors (Lander and Sklar) of the patent application identified above. The assignment was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or a copy thereof is attached.

OR

B.  A chain of title from the inventor(s) of the patent application identified above, to the current assignee as shown below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or a copy thereof is attached.
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3. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or a copy thereof is attached.

Additional documents in the chain of title are listed on a supplemental sheet.

**RECEIVED**

**JUN 20 2003**

**TECH CENTER 1600/2900**

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

Date: June 4, 2003

Name: Patricia Granahan, Esq.

Title: Patent Counsel

Signature: Patricia Granahan

*Copy*  
Multi-Sole

ASSIGNMENT

WHEREAS, I, Eric S. Lander, together with co-inventors Pamela Sklar, Melvin G. McInnis, J. Raymond DePaulo, Jr., Virginia Willour and James Potash, have invented a certain improvement in **ASSOCIATION OF DOPAMINE BETA-HYDROXYLASE POLYMORPHISMS WITH BIPOLAR DISORDER**, described in an application for Letters Patent of the United States, the specification of which:

- is being executed on even date herewith and is about to be filed in the United States Patent Office;
- was filed on January 22, 2002 as Application No. 10/054,678;
- was patented under U.S. Patent No. [ ] on [ ].

WHEREAS, Whitehead Institute for Biomedical Research (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the State of Delaware and having a usual place of business at Nine Cambridge Center, Cambridge, Massachusetts 02142, desires to acquire an interest therein in accordance with agreements duly entered into with me;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, I have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, my entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application, together with my entire right, title and interest in and to said application and such Letters Patent as may issue thereon; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by me had this assignment and sale not been made; I hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. I hereby acknowledge that this assignment, being of my entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein;

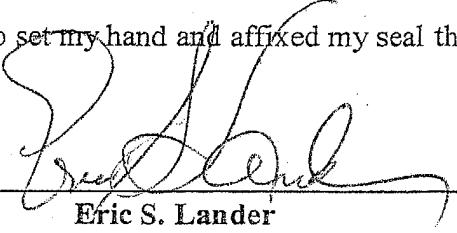
AND, I hereby further agree for myself and my executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of substitution, reissue, divisional or continuation applications and preliminary or other statements and the giving

of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

AND, I do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my seal the date set forth below.

Inventor:

  
Eric S. Lander

State/Commonwealth

of Massachusetts

County of Middlesex

Then personally appeared before me the above-named Eric S. Lander and acknowledged that he executed the foregoing instrument as his free act and deed this 30<sup>th</sup> day of July, 2002.

(SEAL)

Erin P. Magle Notary Public

Erin P. Magle (print name)

My Commission expires 6/12/2009

Multi-Sole

ASSIGNMENT

WHEREAS, I, **Pamela Sklar**, together with co-inventors **Eric S. Lander, Melvin G. McInnis, J. Raymond DePaulo, Jr., Virginia Willour and James Potash**, have invented a certain improvement in **ASSOCIATION OF DOPAMINE BETA-HYDROXYLASE POLYMORPHISMS WITH BIPOLAR DISORDER**, described in an application for Letters Patent of the United States, the specification of which:

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[ ] was patented under U.S. Patent No. [ ] on [ ].

WHEREAS, **Whitehead Institute for Biomedical Research**, a corporation organized and existing under the laws of the **State of Delaware**, and having a usual place of business at **Nine Cambridge Center, Cambridge, Massachusetts 02142**, and **The General Hospital Corporation**, a corporation organized and existing under the laws of the **Commonwealth of Massachusetts**, and having a usual place of business at **55 Fruit Street, Boston, Massachusetts 02114** (jointly hereinafter "ASSIGNEES") desire to acquire an interest therein in accordance with agreements duly entered into with me;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, I have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEES, their successors, assigns and legal representatives, my entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application, together with my entire right, title and interest in and to said application and such Letters Patent as may issue thereon; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEES for their own use and behalf and for their successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by me had this assignment and sale not been made; I hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. I hereby acknowledge that this assignment, being of my entire right, title and interest in and to said invention, carries with it the right in ASSIGNEES to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEES' selection and the right to procure the grant of all such Letters Patent to ASSIGNEES' for their own name as assignees of the entire right, title and interest therein;

AND, I hereby further agree for myself and my executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEES, their

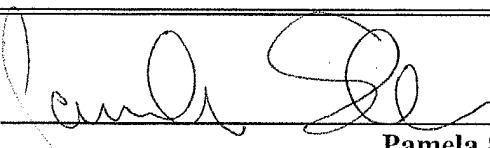
*COPY*

successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of substitution, reissue, divisional or continuation applications and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

AND, I do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEES, their successors, assigns, and legal representatives.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my seal the date set forth below.

Inventor's Signature:



Pamela Sklar

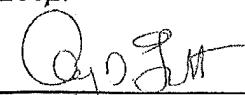
State/Commonwealth

of Massachusetts

County of Middlesex

Then personally appeared before me the above-named **Pamela Sklar** and acknowledged that she executed the foregoing instrument as her free act and deed this 22 day of April, 2003.

(SEAL)



Notary Public

Amy D. Garrett (print name)

My Commission expires 2 / 5 / 2010